

CLAIMS:

1. A pharmaceutical comprising:

(a) a therapeutic protein that binds to a therapeutic target, said  
5 protein being modified with a compound that inhibits binding of the protein to the  
therapeutic target, said modified protein being effective for reducing side effects  
caused by the protein and for producing a therapeutic effect by binding to the  
therapeutic target; and (b) a pharmaceutical carrier.

2. The pharmaceutical of Claim 1 wherein the therapeutic protein is an  
10 antibody that includes an antibody combining site that binds to the therapeutic  
target.

3. The pharmaceutical of Claim 2 wherein the compound is bound to the  
antibody combining site of the antibody.

4. The pharmaceutical of Claim 3 wherein the compound is also linked to  
15 the antibody.

5. The pharmaceutical of Claim 3 wherein the compound is a peptide.

6. The pharmaceutical of Claim 5 wherein the avidity of the modified  
antibody combined with the peptide is at least 4-fold less than the avidity of the  
unmodified antibody and no more than 100-fold less.

7. The pharmaceutical of Claim 6 wherein the antibody is an aglycosylated  
20 antibody.

8. The pharmaceutical of Claim 7 wherein only one of the chains of the  
antibody has a peptide linked thereto that binds to the antibody combining site.

9. The pharmaceutical of Claim 3 wherein the compound is reversibly  
25 bound to the antibody combining site, whereby the amount of antibody that binds

to the target increases as the compound is displaced from the antibody combining site.

10. The pharmaceutical of Claim 9 wherein the compound bound to the antibody combining site is also linked to the antibody.

5 11. The pharmaceutical of Claim 10 wherein the compound is a peptide.

12. The pharmaceutical of Claim 11 wherein the Fc portion of the antibody is aglycosylated.

13. The pharmaceutical of Claim 11 wherein binding of the antibody to the Fc receptor is essentially eliminated.

10 14. The pharmaceutical of Claim 10 wherein the antibody is a non-human antibody.

15. The pharmaceutical of Claim 10 wherein the antibody is a chimeric antibody.

15 16. A process for treating a mammal, comprising administering to a mammal the pharmaceutical of Claim 1 in an amount effective to both treat the mammal and reduce side effects against the protein.